calculated to advantage their private interests and disadvantage PCS' development as a vibrant, competitive service and must be disregarded.

B. Nationwide Licensing Will Not Promote the Development of PCS

For very sound reasons, few commenters support nationwide licensing. Cox submits that this proposed licensing scheme suffers from grave deficiencies and should be abandoned.

Those commenters supporting nationwide licensing commonly cite ease of implementation of technical standards and roaming as factors in their support. Although a single nationwide PCS licensee unilaterally could select and implement a nationwide technical standard, an MTA based licensing plan would more clearly advance other important goals, such as licensee diversity, without sacrificing the development of uniform technical standards. Cox's preferred approach is that the Commission adopt, or at least guide the determination of, appropriate technical standards. If the Commission nevertheless chooses not to do so, as the Notice and many commenters recognize, the collective efforts of numerous licensees to arrive at technical standards may well yield superior technical standards than those chosen by a single licensee.[32/] In any event, it is clearly in each PCS provider's self interest to conclude expeditiously technical standards discussions and to provide interoperable service.

The huge financial resources required to provide nationwide service will severely limit the number of eligible applicants. Small and mid-sized entrepreneurs will effectively be foreclosed from participating in the development

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32/ Notice at 5699-5701.

of PCS. Nationwide licensees also will not be able to provide service as quickly in as many areas as regional licenses because nationwide providers will have to implement service over vastly wider areas.

There is no inherent nationwide aspect to PCS. The U.S. wireless market is a regional, not national, market. Since regional PCS operators will cooperate to offer nationwide roaming for those customers that need such a feature, there simply is no reason to select nationwide licensing for PCS.

## III. LEC ELIGIBILITY ARGUMENTS ARE NOT CREDIBLE

A number of LEC commenters suggest that their participation in PCS is necessary if service is to be developed and made available promptly to rural as well as residential areas. These LEC comments ignore the essential contributions of non-LEC entities to develop PCS using cable television infrastructure, high frequency microwave equipment and standalone delivery techniques as a service independent from LEC dominance or influence. They also overlook the obvious inconsistency of their participation in PCS as licensees with the Commission's goal of establishing local exchange telecommunications competition. Simply put, the LECs' interest in PCS stems from an anti-competitive desire to control or to dominate its development.

### A. Assertions that LECs Must Participate in PCS to Spur its Development Are Without Merit

Several LECs assert that their participation in PCS as licensees will spur the development of PCS. The comments urging the need for LEC participation in PCS as licensees are so clearly self-serving that they should be disregarded.

NYNEX, for example, asserts that PCS will be unavailable to small business residential telecommunications users unless LECs are licensees.[33/] Those statements are ludicrous given the number of cable companies, interexchange carriers, utility companies, competitive access providers, unlicensed (Part 15) parties and other entrepreneurs that filed comments with the Commission demonstrating their capabilities to offer service and equipment to PCS users. There is no basis to believe PCS will not reach a mass market unless the service is provided by a LEC. Indeed, the opposite is more likely; PCS can flourish only if it is provided by entities not focused on maintaining their market dominance over local telecommunications.[34/]

B. LECs Need Not Be PCS Licensees to Develop Their Infrastructure.

While the Notice recognizes that LECs have existing infrastructure which might support PCS, the OPP Paper properly acknowledges that this fact alone does not support LEC participation as PCS licensees in markets where they are the telephone service and cellular service providers.[35/] As Cox observed in its initial comments, PCS cannot achieve the goal of competition if it is hobbled at

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33/ See Report on LEC Role in PCS Market Development, Appendix A to NYNEX Comments at 17-23.

34/ Even in wireless services that the LECs dominate, such as the cellular service, LEC efforts, as often as not, are aimed at stifling the development of the service as a legitimate local telecommunication services competitor. For example, the Commission has had to repeatedly remind the LECs of their obligation to provide reasonable interconnection to cellular carriers, apparently without much effect. See The Need to Promote Competition and Efficient Use of Spectrum, 2 FCC Rcd 2910 (1987) aff'd on recon. 4 FCC Rcd 2369 (1989).

35/ OPP Paper at 60.

the outset by companies that gain more from limiting PCS' competitive capabilities than by fostering its potential for growth as a local exchange alternative.

In the early stages of the PCS proceeding, LEC commenters highlighted the unique aspects of their developing Signalling System 7 ("SS7") networks to support the offering by PCS providers of intelligent network services. They urged the Commission to adopt PCS licensing rules that encouraged PCS licensee use of existing LEC infrastructures. LEC assertions at this stage that they must be licensees to bring PCS service to the mass market ring hollow.

The LECs automatically will enjoy a significant level of participation in PCS by providing intelligent network functions as well as interconnection to the Public Switched Telephone Network. Given the essential nature of these facilities for the development of PCS, and the expected increased utilization of the LEC network, it is plain that the LECs need not be PCS licensees to have an incentive to develop their infrastructure.

### C. LEC "Level Playing Field" Arguments Do Not Consider the Current LEC Market Share of Switched Local Exchange Traffic.

Several LEC commenters suggest that the Commission must allow the LECs to enter PCS on an equal footing with other licensees, so as to maintain a "level playing field" between LECs and other telecommunications services providers. This argument presupposes a level of competition that does not exist within the local exchange. LECs continue to control virtually all local exchange traffic. LECs vigorously resist the efforts of federal, certain state regulators and competitive access providers to provide collocation and interconnection

opportunities to compete for special and switched access traffic.[36/] Complaints of uneven treatment are more properly heard from service providers who have tried to provide competitive alternatives to LECs and been confronted by non-cost based interconnection rates and other anti-competitive LEC practices.

Several LECs also argue that their foreclosure from PCS licensing will radically shift traffic and revenue away from the LECs. Clearly one of the Commission's goals in authorizing PCS is to challenge the overwhelming dominance of the LECs. Given their monopoly position in the local exchange today, a possible byproduct of successful competition may be some loss of LEC market share. That, however, is not a reason to permit LEC participation in a service that they have every incentive to stifle.[37/]

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36/ See Expanded Interconnection with Local Telephone Company Facilities proceedings: Petitions for Stay Pending Judicial Review or Agency Reconsideration were filed by Tier 1 LEC Joint Petitioners, Ameritech Operating Companies, The Bell Atlantic Operating Companies and Southwestern Bell Telephone Company in early November 1992; Bell Atlantic Telephone Companies et al v. FCC, Petition for Review and Illinois Bell Telephone Company et al v. FCC, Joint Petition for Review, were filed in the United States Court of Appeals for The District of Columbia Circuit on November 25, 1992.

37/ Further, this argument overlooks that the LECs will be compensated for interconnection and use of their intelligent network facilities. LECs will benefit financially from the additional use of their facilities generated by new PCS traffic. As a result, it is not clear that the LECs will lose revenue from the advent of PCS.

## IV. LICENSEE SELECTION PROCESS

### A. Comparative Hearings Are the Best Method to Select Qualified Licensees

Cox has urged the Commission to use comparative hearings to select the best qualified PCS applicants. After reviewing the initial comments, Cox remains convinced that comparative hearings offer the only real opportunity to assure the licensing of entities that are ready, willing and able to develop PCS to its fullest potential.

Cox recognizes that the Commission has concerns regarding additional delay and expense to the Commission, interested parties and the public if comparative hearings are adopted. Cox believes, however, that rather than placing lottery licenses in the hands of entities that lack intent or relevant expertise to construct and operate PCS systems, the public would be better served if streamlined comparative hearings were utilized.[38/] There are effective methods available to keep comparative hearings on track, such as self-funding paper hearings; expedited appeal to the full Commission, use of alternative dispute resolution; and establishment of short time periods for required filings. Comparative hearings permit the Commission to review and evaluate thoughtful proposals for the development of competitive services. As at least one

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38/ Unlike the cellular comparative hearings, where most technical parameters were set by Commission rules and there were in many cases only minor differences among competing service proposals, there will be demonstrable qualitative differences among PCS applications that can be objectively evaluated.

commenter has suggested, the Commission could adopt a system with points awarded for a variety of objective criteria related to the applicant's abilities.[39/]

### B. Comments Demonstrate that Even Reformed Lotteries Will be Abused

Lotteries are a demonstrably imperfect process. While the Notice solicits comment on possible lottery reforms, the many enhancements, refinements and restrictions proposed for PCS lotteries are unlikely to eliminate speculators and fast buck application factories.

Given its promise, PCS should not suffer the same fate as other new services licensed by lottery, such as the 220-222 MHz service.[40/] It is significant that at least one mass market application preparer filed comments with the Commission urging the retention of lotteries, albeit with strict thresholds or other reforms.[41/] This suggests that whatever reforms the Commission adopts for PCS lotteries (including financial thresholds and technical showings) will be

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39/ See Comments of PerTel, Inc. at 14-15.

40/ When the Commission opened a lottery filing window, it received approximately 60,000 applications for the new private land mobile service in the 220-222 MHz band. See Amendment of Part 90 to Provide for the Use of the 220-222 MHz Band by the Private Land Mobile Radio Services, 7 FCC Rcd 898 (1992). Even more applications would have been filed if the Commission had not imposed a freeze on accepting new applications. See Acceptance of 220-222 MHz Private Land Mobile Applications, 6 FCC Rcd 3333 (1991).

41/ See Comments of Express Communications at 10-17.

circumvented by entities that put together individual speculators into consortia to file applications.[42/]

Finally, those parties that propose use of strict post licensing non-transferability regulations as the main mechanism to limit the speculation inherent in lotteries are misguided. If the Commission chooses to adopt reformed lotteries rather than comparative hearings to select PCS licensees, those applicants who lack the ability or intent to build or operate should be screened out by requiring strong financial and technical showings at the outset. Speculative trafficking in PCS licenses must also be prohibited. Once a party has demonstrated its qualifications and been issued a construction permit, however, there is no public policy served by limiting the licensee's ability to flexibly implement service.

## V. LEC INTERCONNECTION AND SERVICE PRICING REFORM MUST ACCOMPANY PCS DEVELOPMENT.

The large majority of comments filed in response to the Notice's interconnection proposals agree that the Commission must adopt a federal right of interconnection for PCS. There was also widespread support for the Commission's proposal to assure that PCS providers obtain reasonable interconnection at rates and terms no less favorable than those offered by the

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42/ Commission ALJ Miller observed in a recent decision rejecting fraudulent cellular lottery applications that "[w]hen it adopted a lottery allocation program, the Commission must have been aware that it was extending an open invitation to every gambler, speculator, and confidence man within reading distance". The lottery process itself, despite the Commission's best efforts to reform it, is fatally flawed. See Algreg Cellular Engineering et al., Initial Decision, CC Docket 91-142, at ¶ 78, rel. December 22, 1992.

interconnection at rates and terms no less favorable than those offered by the LEC to any other customer or carrier.

While those proposed PCS interconnection principles are a useful starting point for consideration, they fall far short as a mechanism to open up local exchange competition. Competition will begin only when the Commission requires that LECs provide mandatory cost-based network unbundling, number portability, co-carrier compensation, equal access to LEC signalling systems and informational databases, and reciprocal compensation for carrier-provided switching and termination functions. General statements supporting a PCS federal interconnection right or adoption of a "most favored nation" requirement are insufficient to achieve the Commission goal of developing PCS as a competitive alternative.

Cox cannot support maintaining the status quo for PCS interconnection. The development of PCS is far too important to permit established patterns of LEC anti-competitive interconnection pricing to continue. As Cox pointed out in its comments, cost based, unbundled interconnection at the local level has not been achieved. The adoption of currently available rates and terms for PCS interconnection will merely perpetuate LEC dominance of the local telecommunications market.

In pursuing its Expanded Interconnection initiatives the Commission demonstrated a willingness to require the largest LECs to reformulate existing relationships and price structures to make possible the development of alternative telecommunications service providers to a much broader segment of the public. PCS interconnection requires the same Commission resolve.

## VI. CABLE-BASED PCS DOES NOT VIOLATE THE CABLE-TELCO CROSS-OWNERSHIP PROHIBITION.

Several LEC commenters have suggested that statutory cross-ownership prohibitions between cable and telephone companies may bar cable television company participation in PCS. These assertions are completely without merit. They only highlight the lengths to which LEC interests will go to prevent a potential competitor from providing a service that might compete with LEC services. Clearly the cross-ownership ban is not implicated if PCS is provided on a private carrier basis.[43/] However, there is absolutely no basis to the assertion that cable is foreclosed from providing PCS even if it is offered on a common carrier basis.

The cross-ownership ban was adopted and later codified to prevent local telephone monopolists from stunting the growth and development of cable television by denying cable systems access to LEC facilities such as poles, connections and conduit and by improperly cross-subsidizing non-telephone operations with revenues from monopoly services. It is ironic that LECs now seek to use this pro-competitive policy to prevent cable companies from providing telecommunications services long envisioned and championed by the Commission, Congress and the Executive Branch. The Cable Act and the deliberations that led to the adoption of the cross-ownership prohibition, both in Congress and at the Commission, demonstrate that the prohibition does not apply to cable provision of non-video programming, including PCS service.

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43/ Even GTE recognizes, as it must, that PCS provided by cable affiliates under private carrier status would not violate the cross-ownership prohibition. See GTE Comments at 24.

A. The Cable Act Expressly Contemplates that Cable Operators Will Provide Non-Video Programming Services.

Section 613(b)(1) of the Cable Act prohibits a common carrier subject to Title II of the Communications Act from providing video programming in its telephone service area. GTE suggests that this provision prevents Cox from developing PCS within its cable franchises. This suggestion is meritless. In fact, when Congress adopted the Cable Act it fully expected that cable companies would provide telecommunications services in competition with LECs.

GTE and other LEC interests conveniently focus only on Section 613(b)(1) of the Cable Act to support their argument. This violates the elementary principle that a statute must be read as a whole to understand its meaning.[44/] The remainder of the Cable Act and its legislative history plainly reveal that cable companies are permitted to offer both common carrier services and other non-video programming services.[45/]

The Communications Act generally permits any company to provide common carrier services; and the Cable Act explicitly acknowledges the right of cable companies to provide common carrier services in their franchise areas. 47 U.S.C. §533. Section 612(d) describes the authority of states with respect to

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44/ See, e.g., Crandon v. U.S., 494 U.S. 152, 158 (1990) (Supreme Court looks to "design of the statute as a whole"); see also 2A Sutherland Stat. Const. § 46.05 (statutes are "passed as a whole and not in parts or sections").

45/ The plain meaning of a statute is that of the statute as a whole, not of a single provision taken out of context. The Commission's long-standing interpretation of the meaning of Section 613(b) is contrary to any other claim. See, e.g., Telephone Company-Cable Television Cross-Ownership Rules, Further Notice of Proposed Rulemaking, First Report and Order and Second Further Notice of Inquiry, 7 FCC Rcd 300, 322-323 (1991) ("Cross-Ownership Order").

cable based common carrier services, and authorizes states to impose tariff filing requirements for intrastate services that would otherwise be subject to Title II of the Communications Act. These provisions obviously would be unnecessary if cable operators were not permitted to provide common carrier services. More important, these provisions conflict with the LECs carped reading of Section 613(b). Basic principles of statutory construction, however, require reading a statute to give all elements of the statute meaning.[46/] There would be no point in permitting states to regulate cable provided common carrier offerings if those offerings were simultaneously prohibited by the Act.

The legislative history of the Cable Act confirms that Congress anticipated that cable operators would compete with local telephone companies. The House Report discusses cable provided telecommunications services at length, noting that "[u]ltimately, local telephone companies and cable companies could compete in all communications services, including ordinary voice services." See Report of the House Committee on Energy and Commerce, "Cable Franchise Policy and Communications Act of 1984," H.Rpt. No. 98-934 ("House Report") at 28, reprinted in 1984 U.S.C.C.A.N. 4655, 4664.[47/] See also House Report, 27-29,

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46/ See, e.g., Mountain States Tel. & Tel. v. Pueblo of Santa Ana, 472 U.S. 237, 249 (1985) (statutes should be interpreted so as not to render one part inoperative); see also 2A Sutherland Stat. Const. § 46.06 ("A statute should be construed so that effect is given to all its provisions . . .").

47/ The report on the Senate version of the Cable Act demonstrates that the Senate was equally aware of and open to cable provision of telephone service. In discussing a provision that would have specifically permitted state regulation of cable-provided local telephone service, the committee report stated: "The basic

(continued...)

60-61, reprinted in U.S.C.C.A.N. at 4664-65, 4697-98. Both the House and Senate reaffirmed that judgment when they adopted the final version of the Cable Act. See 130 Cong. Rec. 31872 (Senate), 32279 (House) (1984). Moreover, the Commission has acknowledged that cable operators are permitted to provide telecommunications services. See, e.g., Teleport Communications, 7 FCC Rcd 5986 (1992) ("Teleport Order"); Heritage Cablevision Associates of Dallas, 6 FCC Rcd 7099 (1991).

In sum, Congress enacted the Cable Act understanding that cable companies might choose to provide telecommunications services. No reasonable reading of the Act supports an assertion that the cross-ownership prohibition prohibits Cox's development and provision of PCS service within its cable franchise areas.

### B. The History of the Cross-Ownership Prohibition Confirms that Cable Companies May Provide Other Than Video Programming Services.

The Cable Act and its legislative history confirm that Cox may provide PCS without violating the cross-ownership ban. This interpretation is further supported by the Commission's rationale when it adopted the cross-ownership prohibition. The Commission's rationale is particularly significant because the Cable Act was intended to codify existing Commission rules. House Report at

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47/ (...continued)
telephone service definition and this exception does not mean that a cable system is prohibited from offering the traditional universal, switched voice telephone service. In fact such new entry is in the public interest." Report of the Senate Committee on Commerce, Science, and Transportation, "Cable Telecommunications Act of 1983," S.Rpt. 98-67, at 23.

56, reprinted in 1984 U.S.C.C.A.N. at 4693. Thus, the reasoning underlying the adoption of the original rule is essential to interpret the Cable Act provision concerning telco-cable cross-ownership.

The Commission designed the cross-ownership rule to prevent predatory behavior by telephone companies. Since the cross-ownership prohibition was first adopted by the Commission in 1970, the Commission consistently has stated that the restriction was intended to prevent cross-subsidization of affiliated cable and video programming operations by a dominant common carrier telephone company's regulated monopoly operations and to prevent anti-competitive conduct by telephone companies that possess monopoly control over critical bottleneck facilities, such as utility poles and underground conduit, that are essential for the distribution of cable television services.[48/] The Commission reiterated this policy objective in November of 1991:

> [W]e have consistently held that when telephone common carriers (including non-dominant interexchange carriers) do not control

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48/ See, e.g., Further Notice of Inquiry and Notice of Proposed Rulemaking, CC Docket No. 87-266, 3 FCC Rcd 5849, 5849-50 (1988); Notice of Inquiry, CC Docket No. 87-266, 2 FCC Rcd 5092, 5092-93 (1987); Applications of Telephone Companies for Section 214 Certificates for Channel Facilities Furnished to Affiliated Community Antenna Television Systems (Final Report and Order), 21 F.C.C.2d 307, 324, recon. in part, 22 F.C.C.2d 746 (1970), aff'd sub nom. General Telephone Co. v. United States, 449 F.2d 846 (5th Cir. 1971) ("Initial Cross-Ownership Order").

> essential exchange facilities such as poles and conduit, the concerns about exclusionary conduct which underlie the rules are not implicated.

Cross-Ownership Order, 7 FCC Rcd at 322-23.[49/]

### C. Commission Precedent Under The Cable Act Precludes Applying The Cross-Ownership Prohibition to PCS.

As shown above, the Cable Act's cross-ownership prohibition does not apply to cable companies' non-video programming activities, including Cox's development and provision of PCS. At the same time, the Commission's consistent interpretations of Section 613(b) limit the cross-ownership prohibition to traditional landline local telephone companies. Thus, Cox's provision of PCS will not implicate, let alone violate, the prohibition. LEC efforts to construct a scenario under which a cable-PCS combination would violate the prohibition if PCS is provided on a common carrier basis simply are not supported by Commission precedent and represent another example of the lengths the LECs will go to forestall or foreclose potential competition.

#### 1. The Cross-Ownership Prohibition Applies Only to Traditional Monopoly Local Exchange Carriers.

In order for the cross-ownership rule to apply, an affiliate of a telephone company must provide video programming directly to subscribers in the

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49/ When considering the original cross-ownership prohibition, the Commission also recognized the potential for cable operators to provide telecommunications services in competition with telephone companies, just as Congress did later when it adopted the Cable Act. See Initial Cross-Ownership Order, 21 F.C.C.2d at 324-25 (describing services cable could provide); see also "FCC Policy on Cable Ownership," Federal Communications Commission, Office of Plans and Policy, at 175 (Nov. 1981) (describing role of cross-ownership prohibition in preserving cable's ability to provide competition to local telephone companies).

"telephone service area" of the affiliated common carrier. Neither the Cable Act nor the Commission's regulations define the term "telephone service area." However, Commission case law, consistently interpreted since the enactment of the cross-ownership prohibition, has applied the ban only to dominant carriers providing landline local exchange telephone service.

The Commission has had many opportunities to determine when the cross-ownership prohibition applies and, every time it has considered the question, the Commission has ruled that the cross-ownership ban is directed only at the dominant landline local exchange carrier. Cellular radio operators and resellers of interexchange services, for example, are not subject to the prohibition.[50/] Although AT&T is deemed a dominant carrier by the Commission, it is not subject to the ban because it lacks the attributes of a monopoly local exchange carrier.[51/] Finally, cable affiliation with a competitive access provider was found not to violate the cross-ownership prohibition.[52/] In each of these cases, the Commission found the cross-ownership ban inapplicable because these carriers lacked control over essential facilities. See id. at 322-23.

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50/ See Implementation of the Cable Communications Policy Act of 1984, 58 R.R.2d 1, 16 (1985), recon. denied in relevant part, 60 R.R.2d 514 (1986), aff'd in relevant part sub nom. ACLU v. FCC, 823 F.2d 1554 (D.C. Cir. 1987), cert. denied, 108 S.Ct. 1220 (1988) ("Cable Act Implementation Order"); Letter to Robert J. Butler, Esq. from Richard M. Firestone, Chief, Common Carrier Bureau, released July 9, 1990 regarding the Petition for Declaratory Ruling filed by Twixtel Technologies, Inc. ("Twixtel Letter").

51/ Cross-Ownership Order, 7 FCC Rcd at 323.

52/ Teleport Order, 7 FCC Rcd at 5988.

The Commission recently described the basic distinction between LECs and other carriers by holding that only local exchange carriers, i.e., traditional landline local telephone companies, have "telephone service areas" within the meaning of the statute. As the Commission explained:

> The legislative history [ ] does make clear that Congress intended to codify the existing cross-ownership restriction. In light of the underlying purposes of the Commission's original ban and its application by the Commission, we find that the cross-ownership ban was intended to apply only to local exchange carriers, i.e., that "telephone service area" in Section 613(b) refers to local exchange service areas.

Id. at 322. It could not be plainer that the ban does not apply to PCS.

2. PCS Providers Are Not Local Exchange Carriers Within the Meaning of the Cross-Ownership Prohibition.

LEC interests appear to believe, without any basis, that PCS providers will be local exchange carriers with telephone service areas under the terms of Section 613(b). However, it is far too early to predict exactly what role will be served by a PCS provider and what regulatory status will apply to PCS offerings. Plainly, there is no basis to assume that a PCS provider will become a traditional landline local telephone company or that it will have a telephone service area as those terms are defined in the jurisprudence interpreting the telco-cable cross-ownership ban. A PCS provider also lacks certain distinguishing characteristics that implicate the cross-ownership prohibition, including a state-sanctioned monopoly and bottleneck control over facilities essential for the development of cable systems.

The legal test for determining whether a carrier has monopoly bottleneck facilities subject to the cross-ownership prohibition is whether the carrier controls "exchange facilities" essential for the development of cable systems. This test has been affirmed repeatedly by the Commission, not only in the Teleport Order, but in its other cross-ownership decisions.[53/] See Teleport Order at 5988; see also Cross-Ownership Order, 7 FCC Rcd 300, 322-323 (1991). Only when a carrier has the ability "to engage in anticompetitive conduct toward independent cable operators by denying access" does it have bottleneck facilities. See id. at 322. Using this standard, as both the Teleport Order and Cross-Ownership Order explain, the Commission applies the cross-ownership ban only to "landline local exchange telephone companies with monopoly control of bottleneck facilities." Teleport Order at 5988.

Under this "essential facilities" test, there is no basis to conclude that a PCS provider will have bottleneck facilities. A myriad of facilities could be utilized by PCS providers to deliver their services, including non-telco microwave facilities, cable television facilities, interexchange carrier facilities, or competitive access provider facilities. Because of the wide variety of facilities available that a

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53/ The concern over bottlenecks was an important element of the general determination that the cross-ownership prohibition was necessary to prevent anti-competitive conduct by local exchange carriers harmful to cable operators and costly to telephone ratepayers. See Applications of Telephone Companies for Section 214 Certificates for Channel Facilities Furnished to Affiliated Community Antenna Television Systems (Final Report and Order), 21 F.C.C.2d 307, 324, recon. in part, 22 F.C.C.2d 746 (1970), aff'd sub nom. General Telephone Co. v. United States, 449 F.2d 846 (5th Cir. 1971).

distribution of video programming to cable subscribers. Cable operators offering video programming need ubiquitous, contiguous conduit in populated residential areas for their operations. PCS facilities, however they may develop, will be primarily radio based services operating on limited amounts of spectrum.[54/]

### 3. A Non-LEC PCS Provider Is Not a Local Exchange Carrier.

A PCS provider will not be a local exchange carrier under any traditional definition of the term. While PCS may provide some forms of local telecommunications service, it has no state-granted monopoly.

The Commission's analysis of the inapplicability of the cross-ownership rule to cellular carriers is particularly instructive. Functionally, cellular carriers may be similar to LECs because both provide local telephone service. Nevertheless, cellular carriers are not subject to the cross-ownership prohibition because, like future PCS providers, cellular carriers do not control bottleneck facilities essential for the development of cable. See Cable Act Implementation Order, 58 R.R.2d at 16. Consequently, PCS providers, like cellular carriers, are not local exchange carriers and, therefore are not subject to the cross-ownership prohibition.

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54/ If the mere ownership of telecommunications facilities renders a carrier a "bottleneck," many carriers already found not to be subject to the cross-ownership provision (including interexchange carriers and cellular carriers) would be "bottlenecks." This result would be contrary to the Commission's existing and well-founded precedent.

## VII. CONCLUSION

The Commission has received numerous comments in support of licensing PCS in a manner that advances the Commission's goal of introducing competition into the local telecommunications market. The regulatory framework best suited to accomplish this goal would: (1) provide each PCS operator with a 40 MHz assignment, the minimum sufficient spectrum assignment to fully develop a range of competitive services; (2) create a substantial spectrum reserve in the 1850-1990 MHz band that spectrum constrained PCS operators could access to ensure they are not blocked from developing service; (3) license markets by Major Trading Areas; (4) reform local exchange interconnection and pricing policies; and (5) select the best qualified as PCS licensees through streamlined comparative hearings.

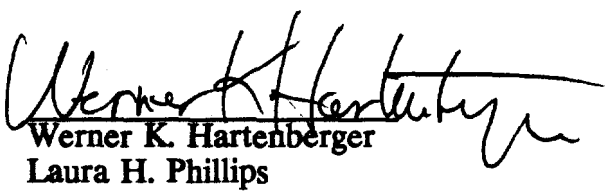
PCS license eligibility should be tied to a potential provider's ability and incentive to provide competitive telecommunications services. Cox submits that LECs and their affiliates, including cellular, should not be PCS licensees within their markets.

There is no merit to the comments that suggest legal or other problems stemming from cable participation in PCS. The cable-telco cross-ownership prohibition clearly contemplates cable offerings of non-video programming including private carrier and common carrier services. The Commission has affirmed that the cross-ownership rule is applicable only to traditional landline

local exchange carriers. For these reasons, the LEC arguments against cable participation in PCS should be disregarded.

Respectfully submitted,

COX ENTERPRISES, INC.



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January 8, 1993

This spectrum sharing model has been developed to characterize the impact of the microwave environment upon PCS. Using this model, we can determine the size of interference areas around any selected microwave paths within a given MSA.

The model commences by making certain assumptions about the PCS system. For instance, since we seek to characterize the interference impact throughout a given MSA, the model assumes that a PCS system has been uniformly deployed throughout the given MSA. A uniform grid is placed over the MSA, and a PCS transmitter is assumed to be operating at each grid point. The granularity of the grid can be changed, and a resolution of 10 seconds was used for this analysis.

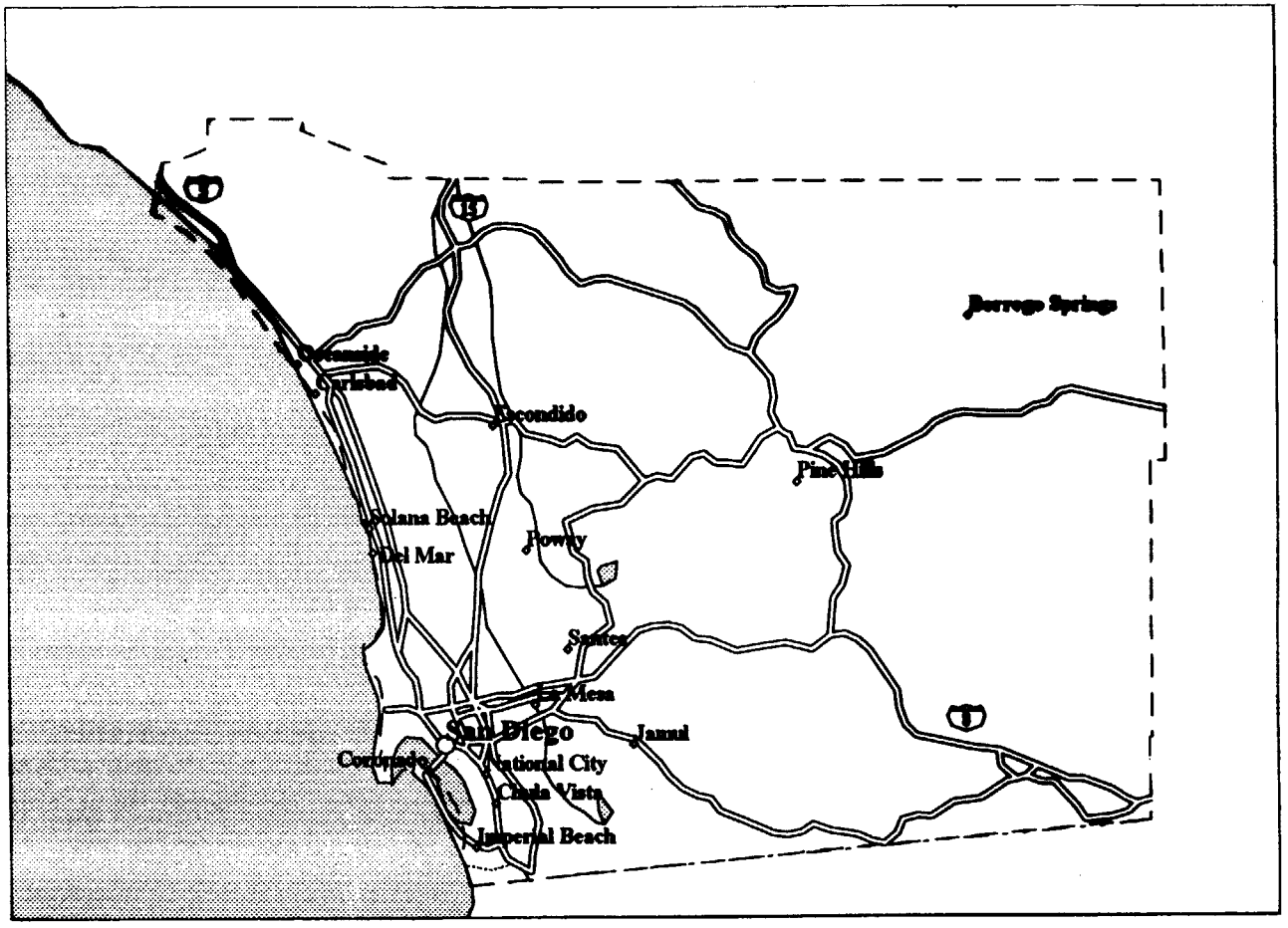
The user can select which microwave paths are to be considered in the analysis. The model then looks at each PCS transmitter and calculates the interfering signal level from this transmitter into every selected microwave receiver in the MSA. When calculating this interfering signal level, the model considers the microwave antenna pattern as well as the microwave receive filter pattern. Thus, for each grid point, the model calculates which frequencies cannot be used due to the potential to cause harmful interference into the microwave environment. The model sums the contribution from each PCS grid point into a given microwave receiver. This the method recommended by the FCC in the PCS NPRM (92-333).

The output of the model is a plot showing the MSA and the areas where varying amounts of spectrum are unavailable. A plot can be provided for any maximum amount of available spectrum. For example, for this analysis, we have included plots for each PCS block allocation. Thus, there are plots for 20 MHz, 30 MHz, and 40 MHz maximum amounts of available spectrum.

The operating parameters of the PCS system can be changed to reflect both CDMA and TDMA systems. For the purposes of this analysis, a generic TDMA system was selected with a maximum EIRP of 30.0 dBm

To study the effect of the three PCS allocation schemes on the microwave environment, we have included plots showing spectrum availability considering all paths, as well as considering only public safety paths. Since public safety paths can remain in the band indefinitely, the plots for San Diego should provide a close estimate of the amount of available spectrum when all non public safety paths are removed. There are a total of 24 paths in the San Diego MSA, 10 of which are used for public safety operations.

The spectrum availability plots are provided in Attachments 1 - 26. Attachments 1 - 6 show spectrum availability amounts considering all microwave paths for the six spectrum blocks in the 20 MHz allocation respectively (Blocks A - F). Attachments 7 - 12 show the spectrum availability amounts considering only public safety paths for the six spectrum blocks in 20 MHz allocation respectively. Attachments 13 - 16 show spectrum availability amounts considering all microwave paths for the four spectrum blocks in the 30 MHz allocation respectively (Blocks A - D). Attachments 17 - 20 show spectrum availability amounts considering only public safety paths for the four 30 MHz spectrum blocks respectively. Attachments 20 - 23 show spectrum availability amounts considering all microwave paths for the three spectrum blocks in the 40 MHz allocation respectively (Blocks A - C). Attachments 24 - 26 show spectrum availability amounts considering only public safety paths for the three 40 MHz spectrum blocks respectively.




**SAN DIEGO, CA OVERLAY**

LEGEND

| | | | |
|---|---|---|---|
| BLOCK A | 1850-1860 | 1930-1940 | Mhz |
| PCN EIRP | : | 30 | dBm |
| BASE STATION HT | : | 15 | m |
| PCN SUBSCRIBER HT | : | 2 | m |
| CELL SIZE | : | 1.61 | km |

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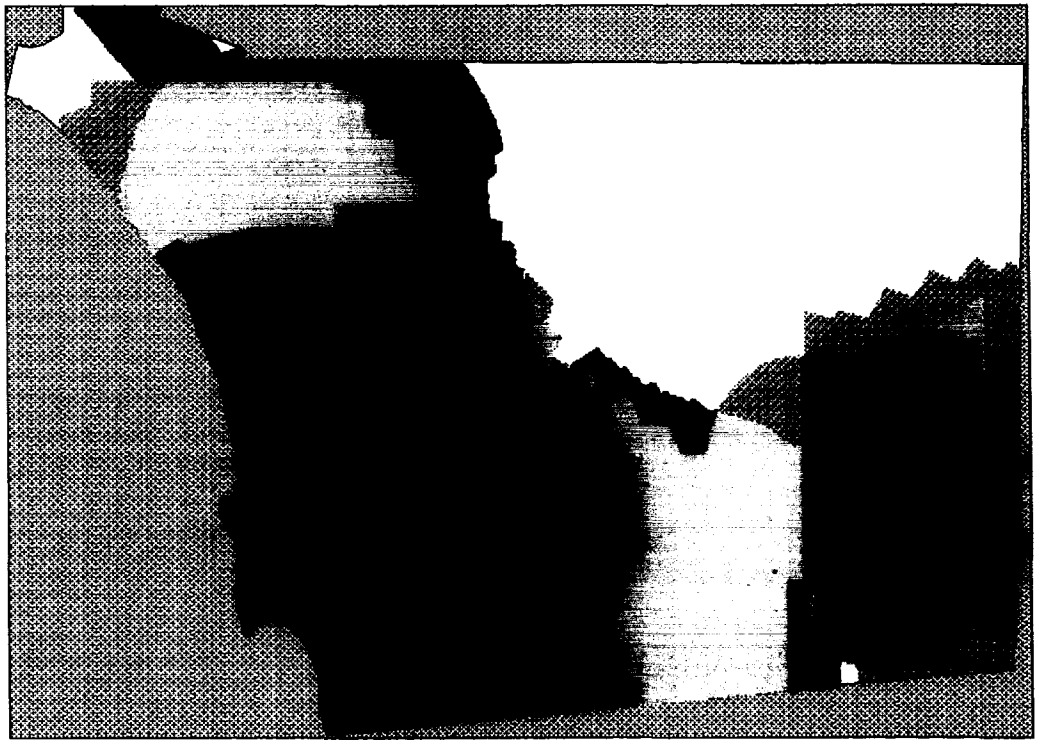
COLOR LEGEND

- 20 MHz Available
- 15-19 MHz Available
- 10-14 MHz Available
- 5-9 MHz Available
- 1-4 MHz Available
- 0 MHz Available

## SAN DIEGO, CA MSA



COMSEARCH

**Attachment 1**
20 MHz Allocation - Block A
All Paths

LEGEND

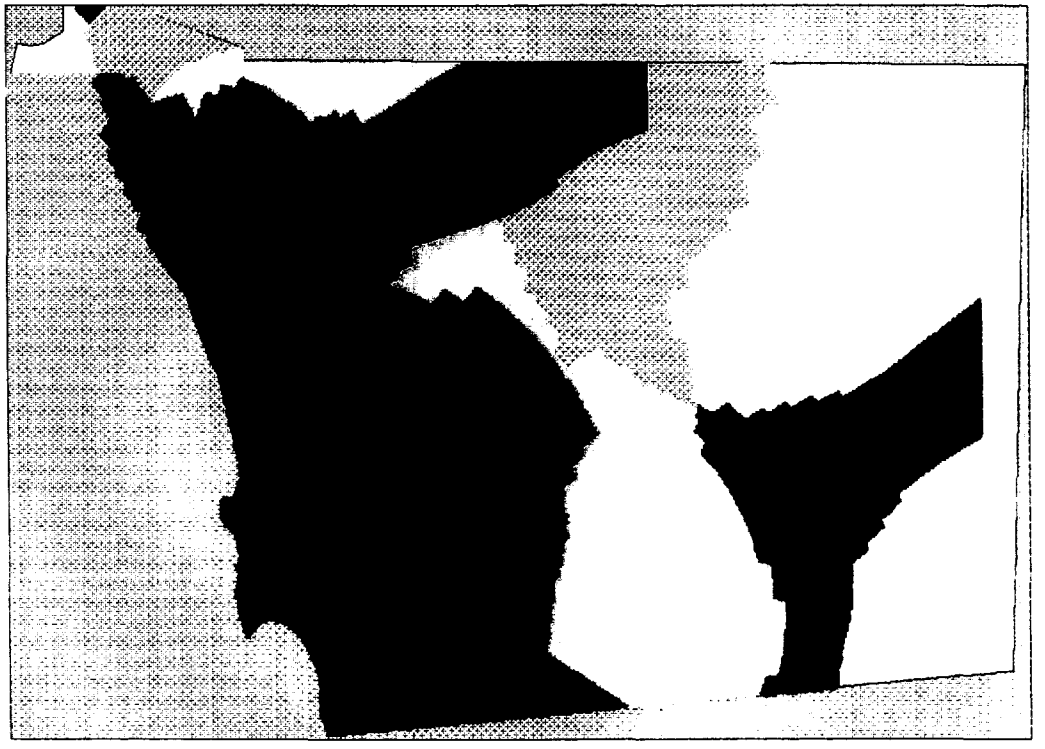
| | | | |
|---|---|---|---|
| BLOCK B | 1860-1870 | 1940-1950 | Mhz |
| PCN EIRP | | 30 | dBm |
| BASE STATION HT | | 15 | m |
| PCN SUBSCRIBER HT | | 2 | m |
| CELL SIZE | | 1.61 | km |

Dec 30 1992

COLOR LEGEND

- 20 MHz Available
- 15-19 MHz Available
- 10-14 MHz Available
- 5-9 MHz Available
- 1-4 MHz Available
- 0 MHz Available

## SAN DIEGO, CA MSA



COMSEARCH

**Attachment 2**
20 MHz Allocation - Block B
All Paths